

This invention was made with Government support under contract number DE-AC02-98CH10886, awarded by the U.S. Department of Energy. The Government has certain rights in the invention.

10 The present application is a continuation-in-part of U.S. Patent Application No. 09/776,117 filed on February 2, 2001, <sup>still pending;</sup> which is a continuation-in-part of U.S. Patent Application Serial No. 09/209,952 filed on December 11, 1998, <sup>new U.S. Patent 6,541,520</sup> which is a continuation-in-part of U.S. Patent Application Serial No. 09/189,166 filed on November 9, 1998, <sup>still pending</sup> which is a continuation-in-part of U.S. Patent Application Serial No. 09/129,253 filed on August 5, 1998, which is now issued U.S. Patent No. 6,057,368, all of which are incorporated herein by reference.

### BACKGROUND OF THE INVENTION

This invention relates to the use of an irreversible inhibitor of GABA-transaminase for the treatment of substance addiction and modification of behavior associated with substance addiction. Substance addiction, such as drug abuse, and the resulting addiction-related behaviors are enormous social and economic problems that continue to grow with devastating consequences.

20 The addictive liability of drugs of abuse, such as for example, cocaine, nicotine, methamphetamine, morphine, heroin, ethanol, phencyclidine, methylenedioxymethamphetamine or other drugs of abuse has been linked to their pharmacological actions on mesotelencephalic dopamine (DA) reinforcement/reward